Listing of claims

- (Currently Amended) A method for manufacturing a circular metal tank, comprising:
 - a) providing an elongated sheet of metal;
 - b) bending said sheet of metal along an upper longitudinal edge thereof to produce a first <u>"L-shaped"</u> bend;
 - c) bending said sheet of metal along a lower longitudinal edge thereof to produce a second "chair-shaped" bend, wherein the term "chair-shaped" means a structure that has two parallel, elongated sheets of metal extending out on either side joined by a cross member with the angle between either sheet and the cross member being at least 45 degrees;
 - d) moving said sheet of metal in a helical trajectory such that said second bend comes into proximity above said first bend;
 - e) welding said second bend to said first bend to form a wall of said tank, said wall having a continuous, leak-tight helical weld;

wherein said first and second bends cooperate to form a helical roller track on an outside of said tank; and

wherein said tank is supported on a plurality of rollers that engage said roller track;

and wherein said tank is rotated about its longitudinal axis on said rollers such that said tank moves upwards as said sheet of metal is welded to <u>a</u> bottom thereof.

- 2. (Original) The method of claim 1, wherein said elongated sheet of metal is a coiled sheet of metal which is decoiled prior to said bending steps.
- 3. (Cancelled)
- 4. (Original) The method of claim 1, wherein said metal sheet is corrugated before said welding step.
- (Original) The method of claim 1, wherein prior to said welding step adjacent portions of said first and second bends are gross positioned and then fine positioned.
- (Original) The method of claim 1, wherein at least one of said rollers is motorized and said tank and said metal sheet are moved by means of said motorized roller.
- 7. (Original) The method of claim 1, wherein said metal sheet is made of one of aluminum, galvanized steel, stainless steel, carbon steel.
- 8. (Currently amended) The method of claim 1/3, wherein said first bend forms an angle of between 45 and 135 degrees with a body of said metal sheet.
- 9. (Currently amended) The method of claim 1 3, wherein said first bend has a width of 5 mm to 100 mm.
- 10. (Original) The method of claim 1, wherein a width of a horizontal portion of said second bend is between 5mm to 100 mm.
- 11. (Original) The method of claim 1, wherein a width of a vertical portion of said second bend is between 5mm to 150 mm.
- 12. (Original) The method of claim 1, wherein a top of said tank is cut so as to create an upper circumferential edge which is parallel to the ground.

- 13. (Original) The method of claim 1, wherein a bottom of the tank is cut during operation to create a lower circumferential edge which is parallel to the ground.
- 14. (Currently amended) A system for manufacturing a circular metal tank, comprising:
 - (a) a decoiler for decoiling a coiled sheet of metal;
 - (b) a bender/corrugator for introducing a first "L-shaped" bend along an upper longitudinal edge of said metal sheet and a second "chair-shaped" bend along a second longitudinal edge of said metal sheet, said "chair-shaped" bend having a structure that has two parallel, elongated sheets of metal extending out on either side joined by a cross member with the angle between either sheet and the cross member being at least 45 degrees;
 - (c) a support system having rollers, for moving said metal sheet along a helical trajectory, supporting said tank and for rotating said tank about its longitudinal axis as said metal sheet is added to a bottom edge of said tank;
 - (d) a welding positioner for positioning said second bend proximate and above said first bend;
 - (e) a welder for welding said first and second bends together to form a <u>leak-tight</u> circular wall of said tank;

wherein said first and second bends cooperate to form a helical roller track on an outside of said tank; and

wherein said tank is supported on said rollers that engage said roller track.

- 15. (Original) The system according to claim 14, further comprising a vertical coil seam welder for butt-welding an end of a first coiled metal sheet to an end of a second coiled metal sheet before said metal sheet pass through said bender/corrugator.
- 16. (Original) A system according to claim 14, further comprising a welding prealigner for gross positioning said first and second bends before said first and second bends are positioned by said welding positioner.
- 17. (Cancelled)
- 18.(Original) A system according to claim 14, wherein said bender/corrugator additionally corrugates said metal sheet.
- 19. (Original) A system according to claim 14, wherein at least one of said rollers is motorized and said tank and said metal sheet are moved by means of said motorized roller.
- 20. (Original) A system according to claim 14, wherein said metal sheet is made of one of aluminum, galvanized steel, stainless steel, carbon steel.
- 21.(Original) A system according to claim 14, wherein said first bend forms an angle of between 45 and 135 degrees with a body of said metal sheet.
- 22. (Original) A system according to claim 14, wherein said first bend has a width of 5 mm to 100 mm.
- 23. (Original) A system according to claim 14, wherein a width of a horizontal portion of said second bend is between 5mm to 100 mm.
- 24. (Original) A system according to claim 14, wherein a width of a vertical portion of said second bend is between 5mm to 150 mm.

- 25.(Original) A system according to claim 14, further comprising means for cutting a top of said tank so as to create an upper circumferential edge which is parallel to the ground.
- 26.(Original) A system according to claim 14, further comprising means for cutting a bottom of the tank to create a lower circumferential edge which is parallel to the ground.